

REMARKS

Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested. The Examiner rejects claims 2, 18, 20, 23 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Orino et al. The Examiner states that with respect to claims 18 and 23 Orino et al. discloses an optical path-to-sight link in Figures 13 and 1 which includes a collimated light beam for transmitting information and having a path directed outside the transmitter pointed in the general direction of a receiver, a moveable mirror coupled in a path between the source and exit point for the collimated light beam for reflecting the collimated light beam to impinge on a photodetector which the Examiner has specified as reference numeral 8 in Col. 1 and the receiver, a beam positioner consisting essentially of a controller which the Examiner has designated as reference numeral 12 in FIGURE 1 responsive to the position of the collimated light and the receiver for controlling orientation of the micromirror which the Examiner has designed as reference numeral 4 in FIGURE 1 so that the collimated light beam is reflected onto the photodetector in which the controller is only responsive to an external signal generated by the receiver in response to the position of the collimated light in the receiver. The Examiner states that it also shows a control loop or link reference numerals 8-12 in FIGURE 1 coupled between the controller and the receiver for providing a control signal to the controller for controlling the micromirror orientation with a control loop that is independent of the optical link. The Examiner goes on to say that Orino et al. does not disclose a micromirror, which is contradictory of his recitation of a micromirror in Paragraph 4, but it concludes that it would have been obvious to one of ordinary skill in the art at a time the invention was made to incorporate a micromirror into Orino et al.

This rejection is respectfully traversed. In FIGURE 1 of Orino et al., the transmitted signal does pass by mirror 4 on its way towards a remote receiver which is shown in FIGURE 13. However, when the signal is received on mirror 4 as shown by the bidirectional arrows of the light coming and going from the device shown in FIGURE 1, it is split and a portion is used to control the angle of the mirror via a light receiving element 8, a signal processor 11, and a mirror driving controller 12. However, the angle of the mirror 4 is controlled only with respect to a local loop within the


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transceiver that is shown in FIGURE 1. That is, the received light is split by splitting mirror 5 and a portion of the received light signal is used to control the angle of the mirror in order to optimize the magnitude of the received signal. This system works well if there are only minor variations in the receipt of the light signal. However, in the alignment of the two (2) transceivers in an optical wireless communications link., as described on Pages 21-31 of the present Application, the two (2) devices are initially not lined up or, some outside forces intervene to move one of the devices out of alignment with the other so that light coming from a transmitter is not received on the receiving mirror of a remote receiver. If one were to utilize the technique taught by Orino et al., if a signal is received by the mirror 4 during one of the scan procedures discussed in the present Application from Pages 21-31, it can only execute local control over its local mirror to produce alignment. There is now way the mirror in the transmitting device can be used to adjust the angle of its mirror so that the light is directed directly at the remote receiver. In sharp contrast, the present invention utilizes a separate link which allows the receiver to tell the transmitter how to adjust the mirror in the transmitter so as to assure maximum signal is received at the receiver. The difference which is not shown or suggested by Orino, et al. is that the change in the angle of the mirror in the transmitter enables communications to be established, whereas only the changing the angle of the mirror in the receiver is only able to adjust for minor variations once the transmitter is correctly aligned with the receiver.

In view of the Examiner's interpretation of the control loop in which the output of the laser diode would be utilized by the receiver section of the same transceiver device to adjust the angle of the mirror, which is not taught or even suggested by Orino, because devices are properly aligned during manufacture, Applicant's have amended claims 18, 19 and 23 to recite that the receiver is a remote receiver and that the beam positioner is responsive to the position of the collimated light in the remote receiver as the control loop is coupled between the controller and the remote receiver for providing the control signal, neither which is shown or suggested by Orino et al.

Accordingly, Applicants believe the Application, as amended, is in condition for allowance, and such action is respectfully requested.

Respectfully submitted,
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